

Curriculum Vitae

Name: Harish Rajendra Patil	Specialization: Mechanical Design Engineering
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Career Objective

To have a growth oriented and challenging career in Design Engineering, where I can contribute my knowledge and skills to the organization and enhance my experience through continuous learning and teamwork.

Profile Summary

A Mechanical Design Engineer with having around 4.5 years of industrial experience and comprehensive knowledge of NPD Process, Machine design, Standard Brought-out part selection, Manufacturing Process, FMEA, DFM/A, CAD tool and Project Management, Manufacturing process, Cycle time study – standardization of process cycle time, Analyzing process involved in product, Costing tool building for product and process.

Skill Sets

NPD PROCESS	Concept generation, Concept screening and feasibility checking, Drawing release, Product development, Evaluation of machine.
MACHINE DESIGN	Design consideration, Material selection, Process defining, Defects consideration, Costing consideration.
TOLERANCE ANALYSIS	GD&T, Stack-up Analysis.
FMEA	DFMEA, DFM/A, Root Cause Analysis, 5 Why Analysis.
SYSTEMATIC PROBLEM SOLVING TECHNIQUES	8D, A3, PDCA.
CAD TOOL	Auto Cad, PTC CREO-4.0, CATIA V-5, Siemens NX10, SolidWorks 2016
SIMULATION TOOL	ANSYS Workbench (Basic Level)
MANUFACTURING PROCESS	Process understanding, Cycle time study, Cycle time standardization, Key drivers improvement in cycle time study.
COMMODITY COSTING	Analysis of process involvement in commodity manufacturing, Costing of commodity, Continuous cost improvement
COSTING TOOL FOR MANUFACTURING PROCESS	Detail study of manufacturing process, Identification of cost drivers for manufacturing process, Preparing standard costing tool for manufacturing process.
COMPUTER SKILLS	Office suites (Microsoft Office, G Suites), Presentation Software (PowerPoint), Excel.
EFFECTIVE COMMUNICATION	Basic function of management – Planning, Organizing, Motivating and controlling with team. Internal team communication, Communication with worldwide clients of organization, Quick and effective problem solving.

Professional Experience

From	To	Organization	Designation
July – 2020	Till Date	SMART SOLUTIONS – COLLABORATIVE SUPPLY CHAINS (USA)	Value Enhancement Engineer
January - 2018	July - 2020	WIBRO FEEDTECH AND AUTOMATION CENTRE PVT. LTD., PUNE	Jr. Design Engineer.
August - 2016	November - 2017	ULTRA ENGINEERS PVT. LTD, CHAKAN, PUNE	Process Developer (M.E.)

Roles and Responsibilities

- ❖ **Current Organization:** SMART SOLUTIONS (INDIA) – COLLABORATIVE SUPPLY CHAINS (Fenton, Michigan, U.S.A.)
Company Profile: Support the Product Development Process, Cost Model Development, drive waste reduction and profit improvement.
Roles and Responsibilities:
 - Building cost model according to the commodity.
 - Cost breakdown, Benchmarking cost drivers, Identify saving, Strategic sourcing
 - Review the drawing package with RFQ.
 - Processing of buyers data, generate model on the basis of buyer's data.
 - Design and development of 3D model for internal organization purpose.
 - Time study for various manufacturing processes.
 - Standardization of process cycle time with the help of time study.

- ❖ **Organization:** WIBRO FEEDTECH AND AUTOMATION CENTRE, TALAWADE
Company Profile: Special Purpose Machine Manufacturer. (Automation)
Roles and Responsibilities:
 - Propose various concepts for special purpose machines to meet the customer needs.
 - 3D Modelling and assembly of Special Purpose Machines, like screwing machine, tapping unit, die pass unit, components assembly machines in CREO - 4.0 and Siemens Unigraphics (NX10).
 - 3D Modelling of singling unit, pick and place units for various screws and components.
 - Designing various sheet metal parts like guarding, bracket doors and mounting brackets.
 - Drafting of designed components with detail Bill of Material (BOM).
 - Prepare drawing for laser cutting and development drawing for manufacturing.
 - Selection of pneumatic accessories, bearings, sensors and material for component.
 - Participation in mechanical design with team work including product specifications, material selection, CAD design, and detailed product drawings.
 - Collecting and analysing data from test on machines and according to that modifying the machine.

- Interface with other company departments to ensure effective communications of Design Development and continuing engineering activities.
- Project management experience including developing project plans and time lines, tracking project progress, expediting external action items.

❖ **Organization:** ULTRA ENGINEERS PVT. LTD., CHAKAN

Company Profile: Manufacturer of machined components

Roles and Responsibilities:

- Exposure in design verification, process development to oil and gas projects like, Halliburton, Schlumberger and GE.
- Involvement in all phases of product machining, including conceptualization, creating models, developing process drawings, performing quality test and producing the new product.
- Review the components as per standard approved drawings, BOM and also documents provided from vendors and suppliers like Certificate of Conformance, Material Test Reports.
- Process drawing preparation in AUTOCAD. Handling detailed drawing versions and document version releasing.
- Preparing ITP (inspection test plan) for component and preparing route card for component.
- Worked with quality, manufacturing and design teams to drive product development and review standard specifications.

Technical and Personal Forte

- Comprehensive problem-solving abilities.
- Excellent verbal and written communication skills.
- Co-operative and keen observer.

Course Learned	Certified CAD Engineer
Institute	MPTA Education LTD.
Duration	6 Months

Academics

Degree	College/ School	University/ Board	Year of Passing	Percentage
Master of Engineering (Mechanical Design Engineering)	Dr. D.Y Patil Institute of Technology	Pune University	2018	7.8 CGPA (Aggregate)
Bachelor of Engineering (Mechanical)	Indira Collage of Engineering and Management	Pune University	2016	60 (Aggregate)
HSC	Shree Mhalsakant Vidyalaya & Junior Collage	Maharashtra Board (Pune)	2012	54.83
SSC	Jana Prabodhini Navanagar Vidyalaya	Maharashtra Board (Pune)	2010	72.55

Academics Projects: -

Project Topic (M.E):- Design and Analysis of Spherical Ball Power Transmission System

Company/Organization: Dr. D. Y. Patil Institute of Technology

Duration: 12 months, **Software used:** CATIA V5, ANSYS Workbench

Details:-

This project is based on design and analysis of continuous variable transmitting system. In this project, we design, analyzed and manufacture spherical ball power transmission to enhance the torque carrying capacity which is better than the conventional power transmission. We design our system by analytical method and analyzed it by using ANSYS in static condition and find out most stresses portion in system. By using standards we manufacture the system. We found that designed system is better in performance as compared with CVT's available in market.

Paper Presentation: -

- Presented paper in fourth mechanical post-graduation conference named as “Design and Analysis of Spherical Ball Power Transmission System.”
- International Research Journal of Engineering and Technology (IRJET), “Planetary Ball Continuously Variable Transmission System”, Volume: 05 Issue: 08, Aug 2018, Impact Factor 7.211

Personal Dossier

- **Nationality:** Indian
- **Date of Birth:** 22/02/1995
- **Marital Status:** Unmarried.
- **Languages:** English, Hindi, Marathi, German (Basic – A-1, A-2).
- **Driving License Details:** MH14 20180012318
- **Passport Details:** S7927542
- **PAN Details:** CMSPP7320L
- **Hobbies:** Player and Follower of Football, Marathon Runner, Travelling.
- **Permanent Address:** Lotus Pride, 426/24, Pradhikaran, Nigdi, Pune – 411044.

Declaration

I hereby declare that, all the information given by me is true to all aspects.

Date:-

Place: - Pune, Maharashtra, India

Mr. Harish R. Patil.